



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

*[Handwritten signature]*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/642,438

08/15/2003

Roger Moulton

SOU747/4-8US

2478

7590

07/26/2006

Thomas W. Adams  
Renner, Otto, Boisselle & Sklar, L.L.P.  
Nineteenth Floor  
1621 Euclid Avenue  
Cleveland, OH 44115

EXAMINER

OH, TAYLOR V

ART UNIT

PAPER NUMBER

1625

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/642,438

**Applicant(s)**

MOULTON ET AL.

**Examiner**

Taylor Victor Oh

**Art Unit**

1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-10,12-27,29-55 and 57-59 is/are pending in the application.
- 4a) Of the above claim(s) 14,15,18,19 and 53-55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-10,12,13,16,17,20-27,29-52 and 57-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/16/06</u> . | 6) <input type="checkbox"/> Other: _____  |

**The Status of Claims :**

Claims 1-3, 5-10, 12-27, 29-55, and 57-59 are pending.

Claims 1-3, 5-10, 12-13, 16-17, 20-27, 29-52, and 57-59 have been rejected.

Claims 14-15, 18-19, 53, and 54-55 have been withdrawn from consideration.

Claims 4, 11, 28, and 56 have been canceled.

**Claim Objections**

The objection of Claim 33 has been withdrawn due to the modification made in the claim.

**Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The previous rejection of Claims 1, 3, 7, 10, 12, 23, 25, 27, 30, and 32 under 35 U.S.C. 112, second paragraph, has been withdrawn due to the modification made in the claims; however, the previous rejection of Claims 16-17, 20-21, 43, 50, and 52-53 under 35 U.S.C. 112, second paragraph, has been maintained due to applicants' failure to modify the claims in the amendment.

Art Unit: 1625

In view of the amendment filed on 5/16/06, there are some new issues to be resolved in the claims.

Claims 1, 27, and 43 and their corresponding dependent claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 27, and 43, the phrase "at least about" is recited.

This expression is vague and indefinite because the specification does not point out what is meant by the phrase "at least about". The mere reciting those terms is invalid as indicated in the MPEP:

**A. "About"**

**The term "about" used to define the area of the lower end of a mold as between 25 to about 45% of the mold entrance was held to be clear, but flexible. *Ex parte Eastwood*,**

**163 USPQ 316 (Bd. App. 1968). Similarly, in *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), the court held that a limitation defining the stretch rate of a plastic as "exceeding about 10% per second" is definite because infringement could clearly be assessed through the use of a stopwatch.**

**However, the court held that claims reciting "at least about" were invalid for indefiniteness where there was close prior art and there was nothing in the specification, prosecution history, or the prior art to provide any indication as to what range of specific activity is covered by the term "about." *Amgen, Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 18 USPQ2d 1016 (Fed. Cir. 1991).**

Therefore, an appropriate correction is required.

Art Unit: 1625

In claims 1, and 27, the term "include " is recited. The expression is vague and indefinite because it would mean that there are other components which were excluded from the claims; there is uncertainty as to what they are in the claims.

Therefore, an appropriate correction is required.

In claims 23, and 30, the phrase " the substituent may comprise " is recited. The expression is vague and indefinite because the term "comprise " would mean that there are other components besides one or more halo, alkyl, aryl groups; there is uncertainty as to what other compounds are present in the product. Furthermore, It is well-settled that the term "comprise " do not exclude the presence of other ingredients than the one recited. Ex parte Muench , 79 USPQ 92 (PTO Bd. App. 1948). Therefore, an appropriate correction is required.

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1625

1. The rejection of Claims 1-7, 16-17,20-21, 39-41 and 56 under 35 U.S.C. 102(b) as being anticipated clearly by Longley et al (US 4,480,119) has been withdrawn due to the modification made in the claims.
2. The rejection of Claims 1-7, 16-17,20-21, 39-41 and 56 are rejected under 35 U.S.C. 102(b) as being anticipated clearly by Groote et al (US 2,072,085) has been withdrawn due to the modification made in the claims.
3. The rejection of Claims 1-7,16-17,19-20, 22-24,39-40,43, and 50 under 35 U.S.C. 102(b) as being anticipated clearly by Kissa (US 4,063,889) has been withdrawn due to the modification made in the claims.
4. The rejection of Claims 43, 50, and 52 are rejected under 35 U.S.C. 102(b) as being anticipated clearly by Takimoto et al (US 5,125,968) has been withdrawn due to the modification made in the claims.

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. The rejection of Claims 1-13, 16-17, 20-35, 37, and 39-42 under 35 U.S.C. 103(a) as being unpatentable over Bratescu et al (US 6,306,805) has been maintained with the reasons of record on 3/21/06.
6. The rejection of Claims 27, 36, 38, and 40 under 35 U.S.C. 103(a) as being unpatentable over Quack et al (US 4,150,216) has been maintained with the reasons of record on 3/21/06.

#### **Applicants' Argument**

a. Bratescu et al has failed to suggest an ionic liquid; the very highest content of equivalent amounts of the Bratescu et al is equal to 10 wt. % unlike the claimed composition comprising at least about 55 % by weight.

b. Quack et al has failed to suggest an ionic liquid; the very highest content of equivalent amounts of the Quack et al is equal to 0.5 wt. % unlike the claimed

Art Unit: 1625

composition comprising at least about 55 % by weight; there is no motivation to increase the concentration to the claimed concentration.

Applicants' arguments have been noted, but the arguments are not persuasive.

First, regarding the applicants' first argument, the Examiner has noted applicants' arguments. However, the prior art does suggest that the total concentration of combined cationic, anionic and other surfactants can be from 3 % to 40 % by wt based on the total wt of the composition (see col. 7, lines 10-15); also, it expressly teaches that the composition may contain from 5 to 90 % water and/or solvent (see col. 42, lines 31-34). As the ordinary skilled artisan in the art knows the meaning of the claimed ionic liquid, that is nothing more than the liquid containing equivalent amounts of the anion and cation. Therefore, it would have been obvious to the skilled artisan in the art to be motivated to modify the desired concentration of the ionic surfactants by routine experimentations. This is because the skilled artisan in the art would expect such a manipulation to be feasible as guidance shown in the prior art (see col. 7, lines 10-15). Therefore, the prior art is still relevant to the claimed invention.

Second, regarding the applicants' second argument, the Examiner has noted applicants' arguments. However, the % difference between the current invention and the prior art composition, the claimed ranges (at least 55 wt %) and prior art (10 %) do not overlap but are close enough that one skilled in the art would have expected them to

Art Unit: 1625

have the similar properties. In addition, the limitation with respect to ranges of pH, time, and concentration does not impart patentability to the claimed invention when such values are those which would be determined by one of the ordinary skill in the art in achieving an optimum result. Furthermore, the prior art has offered guidance that the concentration of the sulfo composition may vary depending on the desired effect (see col. 18, lines 37-40). Therefore, it would have been obvious to the skilled artisan in the art to be motivated to modify the desired concentration of the ionic surfactants by routine experimentations. This is because the skilled artisan in the art would expect such a manipulation to be feasible as guidance shown in the prior art (see col. 18, lines 37-40).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taylor Victor Oh whose telephone number is 571-272-0689. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas McKenzie can be reached on 571-272-0670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

\*\*\*

*Mafor V. Oz*  
*7/22/06*